## REDUCTION OF THE MEXICAN GENUS AGIABAMPOA TO ALVORDIA (ASTERACEAE, HELIANTHEAE)

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Agiabampoa Rose ex Hoffm., a monotypic genus of coastal Sonora and adjacent Sinaloa, was first published by Hoffmann and subsequently accounted for in the appendix to his treatment of the Compositate for Die Naturlichen Pflanzenfamilien (1894). In the latter he would position this as genus 407a, in the tribe Heliantheae, subtribe Verbesininae, next to genus 407 (Gymnolomia H.B.K.). The latter has proven to be an artificial assemblage of epappose genera now largely dispersed among Viguiera and yet other Verbesinoid genera (Blake, 1918). In spite of its epappose achenes, however, Agiabampoa, has been retained by subsequent workers, including Blake (1926) Stuessy (1976) and Robinson (1981).

Alvordia Brandegee was also accounted for by Hoffmann (1894) in Die Naturlichen Pflanzenfamilien, this too in his appendix as genus 423a, next to Viguiera, largely because of achenal characters. Alvordia, a small genus of Baja California, Mexico, with only three, closely related species, received an excellent treatment by Carter (1964). She apparantly accepted Hoffmann's position of the genus (between Tithonia and Viguiera) and does not mention at all Agiabampoa, which might easily be mistaken for Alvordia were it not epappose. In any case, Blake (1926) also retained both genera distinguishing between these by their epappose vs pappose condition.

Stuessy (1977) also retained both Agiabampoa and Alvordia but placed them next to each other, along with Lagascea, as the only members of "Group 5" within his subtribe Verbesininae and this view was maintained in his revisional study of Lagascea (Stuessy, 1978).

Robinson (1981) retained both Agiabampoa and Alvordia but included these (along with Lagascea) in his subtribe Helianthinae, which includes Viguiera, a position which I would also favor.

In connection with a treatment of the above mentioned genera for a treatment of the Asteraceae of Mexico, I have had to compare in some detail the characters which distinguish between them. In comparing Agiabampoa with Alvordia I was unable to find a single

significant morphological character that would adequately distinguish between them, except that of pappus present (in Alvordia) vs pappus absent (in Agiabampoa). Indeed, the two genera are almost identical in details of their stylar, androecial, and corolla characters, as well as those of habit, capitulescence and involucre. Alvordia, then, would appear to be a "reduced" Agiabampoa, the latter having more numerous florets to a head (8-20 vs 1-5), but is more advanced in having pappose achenes. The chromosome number of Agiabampoa will perhaps prove pivital in convincing possible skeptics since Alvordia has a base chromosome number of x = 15 (Carter, 1964), an unusual number in the Helianthinae, but not found in Viguiera. I suspect that Agiabampoa will also be found to have a base number of  $\underline{x} = 15$ . Regardless, on morphological grounds, I would opt to treat Agiabampoa as part of Alvordia, as follows:

Based upon <u>Agiabampoa congesta</u> Rose ex Hoffmann, Wiss. Beil. Jahresb. Fried. Werd. Gym. Berl. (reprint 20) and <u>in Die Naturlichen Pflanzenfamilien 4 (5): 390.1894.</u>

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